

STATE OF COLORADO

DIVISION OF RECLAMATION, MINING AND SAFETY

Department of Natural Resources

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February 20, 2014

L. Richard Bratton
Gunnison Valley Properties, LLC
234 N. Main St., Suite 3A
Gunnison, CO 81230

John W. Hickenlooper
Governor

Mike King
Executive Director

Loretta E. Piñeda
Director

Re: Tomichi Pit, New 112c Application, File No. M-2013-081, Technical Adequacy Review Letter

Dear Mr. Bratton,

A packet of "application completeness response materials" submitted on your behalf by your designated agent, Greg Lewicki and Associates, was received by the Division on January 10, 2014. Those responses satisfied the 112c application requirements, and the Division found the new 112c Regular Permit Application for the Tomichi Pit "complete" on January 13, 2014. You and your agent were notified by the Division, under separate cover, to commence publication of the required legal notices.

The Division has been reviewing the 112c application for technical adequacy, to ensure that all parts of the application meet the standards and requirements of the Construction Materials Rules and Regulations ("Rules") and the Construction Materials Act ("Act"). The following items have been identified during the adequacy review as either requiring clarification or requiring corrections. Please respond to each of the listed items below. Portions of the application package not listed below are considered adequate at this time. Please label your responses to facilitate the Division's review and inclusion of the new materials into the application.

Exhibit B – Location Map, Rule 6.4.2

The map scale shown on the location map is incorrect. Please provide a corrected map.

Exhibit C – Pre-mining and Mining Plan Maps, Rule 6.4.3

The introductory text on page C-1 states that the processing area will be located at the southwest corner of the site, although it appears that it will actually be in the southeast corner. Please clarify whether the Division's interpretation is incorrect or the exhibit's original introduction was incorrect.

Maps C-1, C-2 and C-2B all contain the same delineation of the 100-year floodplain. Those depictions, however, do not clearly convey the intended delineations. Please provide revised maps that correctly depict the 100-year floodplain delineation.

Map C-3 consists of several cross-sections of the site (A-A', B-B', C-C', and D-D'). Near both ends of each of those cross-sections there is a symbol representing the permit boundary. However, in numerous cases, those symbols are incorrectly placed. (It should be noted that cross-sections A-A' and D-D' do not extend far enough to capture the permit boundary on both ends, possibly explaining part of this problem.)

Page 1

Specifically, the following permit boundaries are shown incorrectly on the Map C-3 cross-sections:

- the boundary symbol near end point A' should be shown 670 feet NE of Biebels Ditch;
- the boundary symbol near end point B is shown 370 feet too far west;
- the boundary symbol near end point D should be moved to 2+70 along the section; and
- the boundary symbol near end point D' should be moved to 630 feet NNE of Biebels Ditch.

Please provide a revised Map C-3 with corrected cross-sections.

The other Exhibit C maps show numerous structures which are identified as fencelines, according to the map legends. Map C-1, the Pre-mining Map, appears to be attempting to show a complete picture of the existing fencelines, represented as they exist prior to any mining disturbance. The fence symbol is a dashed line with "X"s placed at intervals. However, the scale of the fence symbol employed on the maps does not clearly convey the continuity of the fencelines; specifically, the large gaps in the fence's dashed line symbol are nearly 150 feet long, making it difficult to determine the true extent of all the fences. Please correct or revise this depiction of the fences, preferably on all the maps that are being revised.

There is a gold-colored line along the top of the slopes for the final margins of the two ponds, although this particular symbol is not labeled or identified in the map legends. Does the line indicate simply where the upper edges of the pond banks will be located when the two ponds are fully excavated? Or does it indicate affected land, or another feature? Please clarify by labeling it and/or adding the symbol to the legends of the maps being revised.

Map C-1 contains the names of the affected property owner and those owners within 200 feet of the permitted area boundary, and the property parcel boundaries. The set of property owners' names appears complete and correct, and no changes are required for this. The list of property owners' names found in Exhibit S is slightly different, however, in that (1) it includes names of several properties lying farther than 200 feet from the boundary, and (2) it excludes the name of Dale McDermott, whose land is within 200 feet of the permit boundary. Hopefully you will use the Exhibit C set of names for mailing the required notices to adjacent landowners. Please see additional comments under Exhibit S.

As a final note, please ensure that all updated maps and drawings that are submitted to the Division are signed and dated, labeled by exhibit, and contain the proper file number (M-2013-081).

Exhibit D – Mining Plan, Rule 6.4.4

Proposed activities for the site include crushing and screening, as well as concrete and asphalt production. Approval for these onsite activities will require that more detail is provided this exhibit, specifically regarding locations where each of these activities will occur, equipment to be used, the types of facilities to be installed and used, and how and where fluids for these operations will be stored and contained on the site. For each applicable activity and facility, please provide sufficient detail to allow the Division to evaluate the adequacy and reclamation cost of each of them. Please ensure that all of these items are depicted clearly on the appropriate revised Exhibit C map(s).

The operation will consume water through the exposure of shallow groundwater in the pits, spraying for dust mitigation, and use for batching, to name a few things. A preliminary augmentation plan is provided in Appendix 1. Prior to exposing groundwater, please provide a copy of the finalized and state-approved augmentation plan for the operation's water consumption.

The plan states that concurrent reclamation will occur throughout the operation to minimize disturbance. Please provide more description of these reclamation activities that are proposed, such as what the tasks are, where they will occur, when they will occur, and to what extent (for example, acreages, volumes, gradients, etc.). It may be helpful to provide a Mining Map(s) that shows several stages of the progression of mining and concurrent reclamation in the pits.

The plan states that "a truck scale is installed," but Map C-1, Pre-mining Map does not show one. Is the truck scale already in place on the ranch property at this time? Or is it one of several structures that will be installed near the gravel pit office?

Several structures will be added to the site for the mining phases. Map F, Reclamation Map does not show the truck scale, office, parking area, or fuel farm, which indicates that they will be removed; and Exhibit E mentions that they will be removed during final reclamation. Removal costs depend on the type of structures and their construction, but no details are given. Please provide information about each of the structures that are to be constructed or installed, especially those that are to be removed after mining.

Please clarify whether topsoil will be stripped from the office/scale/parking area, and the temporary internal haul road, prior to their construction.

The topsoil layer is estimated to be an average of 12 inches deep. It is to be stripped in advance of mining and saved for reclamation of disturbed areas and for "plating" the permanent berms to enhance revegetation. It is understood that a large volume of topsoil will be generated, but a significant portion of it will not be needed for final reclamation due to the creation of the permanent ponds on the site. [Please note that topsoil may be viewed as a commodity, and any excess that is not needed for reclamation of the pond banks and/or permanent berms might be sold. If this is desired please include that language in the mining plan.]

Please clarify the description, in paragraph 3 of page D-1, of the steps in stripping and berm-building. It is not clear what the difference is between "the beginning of the operation" and "the beginning of Stage 1," although the materials stripped from those two steps appear to be destined for different berms.

Will the earthwork construction and the revegetation of the permanent berms occur in the first year(s) of the life of the mine?

The application does not define in the mining plan narrative or on the mining maps what the slope gradient of the berms will be. Please state what the maximum slope will be. Be aware that by keeping the slope gradients no steeper than 3H:1V, soil erosion will be reduced and revegetation success will increase.

While the berms are becoming stabilized there will be soil erosion with probable sediment deposition down slope from the toe of the berms. This disturbance could include siltation into the nearby irrigation ditches, and sediment transported under fences and across property lines. It is recommended that sufficient setbacks are allowed to accommodate maintenance and equipment, and that proper sediment control structures (such as wattles or silt fence) are employed where needed. Please comment.

The vegetation of the temporary berm planned for the processing area includes "fourwing saltbush and other brush to be planted" (according to a notation on Map C-2B) but there is no further discussion about this. Please provide information about the saltbush and other brush to be planted, such as: which other brush species are proposed, whether "planting" will be by seed or seedlings, planting quantities and/or seeding rates, and whether addition of those woody species will affect the seeding rate of the rangeland seed mix on the berm (as stated in paragraph 2 of page D-5).

The excess overburden and/or fines will be used as backfill in the pits. The plan proposes 2H:1V pit slopes below the water level. Please note, however, that Rule 3.1.5(7) regulates the slope gradients in pits which are ponds. Slopes are not to exceed 3H:1V within the range of five (5) feet above the water level down to ten (10) feet below the water level. (Below ten feet deep, slopes may be 2H:1V if they can be stable.) Please acknowledge this, and provide corrected backfill volume figures, and maps or cross sections, as needed.

What is to be the pit slope gradient, along the active highwall, during mining? If it is steeper than the final reclaimed gradient, by what method(s) will the slope be reduced?

The plan includes dewatering of groundwater exposed in the pit, to a sediment pond before it is discharged to surface waters in the local drainage. Please provide evidence to the Division of a discharge permit issued by the Colorado Department of Public Health and Environment - Water Quality Control Division (CDPHE-WQCD) prior to commencing discharge activity.

The water management plan includes two earthen sediment ponds, each to be located on the southern side of the two pits. Dewatering will direct groundwater in the pits to the sediment ponds. It is not clear from the Exhibit C maps or from the Exhibit D plan narrative whether the ponds will be constructed by excavating below grade, and/or built up above grade on one or more sides. It is not known if either of them is to be lined, or what the outlet spillway consists of. [These issues are not answered in Exhibit E either, regarding how the sediment ponds will be reclaimed.] Please clarify.

There will be three pumps (or pumping locations): two for dewatering their respective pits and one for directing water to an irrigation pipe above the onsite wetlands. There are three planned outfall locations. During Stage 1, pumping will send water to the sediment pond and Outfall 003, and to Outfall 002 and the wetland irrigation pipe. Is the wetland irrigation pipe capped on its western end, so that it doesn't convey water to Outfall 001? When will the Stage 2 sediment pond be constructed? During Stage 1 will there be any pumped water reaching the Stage 2 sediment pond and Outfall 001? Please clarify.

Please confirm whether the dewatering pumps will be diesel-powered, and, if so, please confirm that adequate secondary containment will be provided to prevent all diesel spills and leakage.

Exhibit E - Reclamation Plan, Rule 6.4.5

On the two permanent berms (along the highway and bordering the Signal Peak properties) the plan is to revegetate them using the rangeland reclamation seed mix and pinyon pine trees. Please provide the specifications for the planted pinyon pine trees, such as type of nursery stock, quantity, size, spacing, staking, fertilizer, irrigation, etc.

The requirement for portions of the final pond slopes not exceeding 3H:1V, in conformance with Rule 3.1.5(7), was discussed under Exhibit D above. Please specify what the slope gradient(s) the highwalls will be during the mining stages, and what the final reclaimed gradient will be. If those slope gradients are different, please state what earthmoving method(s) will be used to attain the final gradient.

On page E-2, the plan states that excess topsoil may be placed on pit slopes or on the pit floor, although it is not clear if this is a temporary measure for stockpiling it, or a permanent disposal measure, even if it is underwater. Please clarify.

The plan also states that materials generated offsite may be imported to the site for reclamation purposes. Please be aware of the Notice required by Rule 3.1.5(9), which must be provided for events involving importation of offsite materials.

The species selection in the two seed mixes appears adequate for their respective sites. There are seeding rates provided, but please specify whether those rates are intended to be expressed in "pounds of pure live seed per acre." If they are not, please adjust the rates accordingly.

The so-called "wetland" mix does not actually seem appropriate for a wetland, but rather for a sub-irrigated meadow site above the water line, since it does not contain emergent species. If true "wetland species" are desired, please provide an updated revegetation plan. See comment about the "wetland fringe" under Exhibit F, below.

Does revegetation of the wetland fringe include willow (such as planting of dormant willow stubs) or other woody species?

The weed control plan appears adequate. If future changes are needed to the plan, please contact this office to determine whether it must involve a technical revision. Weed control monitoring should be carried out regularly and all necessary treatments must be sufficiently aggressive. All weed control-related activities should be included in the annual reports.

Exhibit F - Reclamation Map, Rule 6.4.6

There are several map modifications discussed under Exhibit C, above, which should be made to the Reclamation Map. These items include the berms and their slopes, and the floodplain line, for example.

The reclamation map and Map C-3 (cross-sections) show a "wetland fringe" that occupies an area above and below the water line of both ponds. Please provide additional detail about the vegetation intended for this strip.

Please explain, or depict in more detail, the "New Biebel Diversion for CPW." Is this a structure that has been required or requested by Colorado Parks and Wildlife (CPW)? Is a future approval by CPW for the plan or the construction necessary?

Exhibit G – Water, Rule 6.4.7

There are several comments regarding hydrology under the exhibits above, whose responses also apply to this exhibit. Please refer to the questions above about the dewatering, sediment ponds, irrigation pipe, and final augmentation plan.

Exhibit H – Wildlife, Rule 6.4.8

The text on page H-2 mentions creating a wetland fringe along the lake margins and “around the island.” Please clarify (and depict on maps, if needed) where the island is.

Please clarify the questions about the wetland fringe that were raised in the exhibits above.

There have been sage grouse in the locale of the proposed permitted area. Please further discuss the potential for future presence and necessary mitigations. Please provide copies of any correspondence to and from other jurisdictional authorities in regard to sage grouse on or near the site.

Exhibit L – Reclamation Costs, Rule 6.4.12

Much of the exhibits’ content and many of the issues discussed above will influence the bond amount for this site. The Division will explore in greater depth the costs provided in this exhibit after the responses to this letter have been received by this office. Of particular importance will be providing more information about mining and reclamation sequences, structure specifications, slope gradients and related material volumes, and revegetation details.

Exhibit N – Source of Legal Right-to Enter, Rule 6.4.14

This exhibit is not adequate, in that it does not provide the information necessary to establish the right-to-enter. Please see the explanation of the requirements under Construction Materials Rule 6.3.7.

Exhibit P – Municipalities Within Two Miles, Rule 6.4.16

Please provide the address of the general office of the City of Gunnison, as required by this rule.

Exhibit Q – Proof of Mailing Notices to Conservation District and County Commissioners, Rule 6.4.17

The notices and the proofs of certified mailing have been provided in the application materials. Were the notices mailed with “return receipt requested”? If so, please provide the signed green “delivery” receipts.

Exhibit R - Proof of Filing with County Clerk and Recorder, Rule 6.4.18

This exhibit is adequate, in that it demonstrates filing of the initial application materials. Since you will be responding to this adequacy letter, a complete set of your response materials must be additionally filed with the Gunnison County Clerk and Recorder. This filing should be made in the same manner as was done for the initial application packet; and a receipt must be provided to the Division showing proof of the filing of these additional materials.

Exhibit S – Permanent Man-made Structures, Rule 6.4.19

The requirement of this exhibit is for the applicant to identify the applicable structures, and to provide for each of them one of the following: a completed damage agreement or an engineering evaluation or, in the case of a utility, a statement on utility letterhead.

Please ensure that the list of adjacent property owners is complete, since the list of names does not exactly match that contained on Map C-1 in Exhibit C.

You have provided in this exhibit a list of structures within 200 feet of the proposed affected area. The following comments and questions pertain to the numbered items on your list:

1. Twenty structures owned by other property owners east of the permit area. Adequate, no further information needed.
2. Biebels No. 1 and 2 Ditch runs along the east (not the west) and the north sides of the pit. Question: Is the ditch owned completely by the applicant? If not, please identify other parties who may be affected by damage to this ditch.
3. Eleven ranch structures (owned by applicant) on the north side of the pit, some of which are within the proposed permit boundary. Adequate, no further information needed.
4. U.S. Highway 50 runs parallel outside the north permit boundary. Clarification: It is actually within 200 feet of the permit boundary for over 3,000 linear feet. As mapped, the highway is within 50 feet of the nearly 1,000 linear feet of berms to be constructed. The permit boundary may be contiguous with the highway right-of-way fence, which is within only a few feet of the berms. Please ensure that you identify the owner(s) of said fence, and that a damage agreement is obtained from CDOT if appropriate.
5. Overhead powerlines, owned by Gunnison County Electric, are within the northeast part of the permit area. Comment: They are within 200 feet of the affected area, and a damage statement from the utility must be provided for this.
6. Water wells within 200 feet. There are eight wells shown on the maps along the east side of the permit. Comment: One of them is at the SW corner of BLM land, on the permit boundary, and is within 50 feet of a visual berm. Please obtain a damage agreement if owned by a party other than the applicant.

Other issues related to structures are noted below, which require a response:

The property of Dale McDermott is shown to the NE of the proposed permitted area, possibly lying within 200 feet. It appears to be a residence by the structures that are depicted, but there is no water well. Whether or not the property is within 200 feet, there may be a well within 600 feet. Please confirm whether there is a well.

There is a fenceline along the east permit boundary, which is also on the east property line. Berms are to be constructed within 15-20 feet of the fence. Please identify the owner(s) of the fence, and provide a damage agreement if needed.

Several irrigation ditches enter and exit the permitted area, indicating possible ownership or interest by parties other than the applicant. Many of these ditches are within 200 feet of sites of berm and roadway construction. Please ensure that all owners are identified and all necessary agreements are provided.

Please ensure that you have individually notified all owners of land, structures and easements lying on or within 200 feet of the proposed permitted area. Proofs of each notification must be provided to this office.

Landowner notification – proof

Please provide proof of the mailing and delivery of the notices to the landowners. If the notices were sent by certified mail, please provide all date-stamped postal receipts (proofs of mailing), as well as the signed green cards (proofs of delivery) for each notice mailed.

Geotechnical Stability Exhibit, Rule 6.5

The requirement of this exhibit (which you have named "Exhibit U" though there is no exhibit by that name) is to demonstrate that the proposed mining and reclamation activities will result in a stable site. In this case, a 50-foot deep pit is to be excavated, while dewatering is ongoing. Subsequent grading and backfilling will configure the slope gradients before the pond is allowed to fill. Setbacks from the edge of the pond excavation to significant structures will be a minimum of 50 feet.

The materials provided in the exhibit seek to answer the question of slope stability by use of a table of shear strengths of various soil materials. The basis used is the internal angle of friction from a classification of material ("GC") consisting of sand, clay, and gravel, per Figure U-1, by Huang. The Division is not satisfied with this analysis, for the following reasons:

1. Figure U-1 shows the friction angle of GC to be 31° and not 34° . The factor of safety, therefore, is calculated to be 1.2018, well below the threshold 1.3.
2. The classification GC is based on an analysis of the native earthen materials, though much of the backfilled material which will comprise the slopes will be reject from processing, and will have different textural and structural characteristics.
3. The optimum moisture content for compaction, to achieve maximum strength, does not account for the condition of saturation, as these soil materials will eventually be inundated.

Please provide the following: a better engineering analysis of the actual soil materials that will be used for backfilling; and a description of the methods and standards of compaction to be used, and accounting for a portion of the materials to be underwater. The evaluation should examine the proper maximum slope and minimum required unmined setback.

There is a statement describing the side slopes being "mined to 3H:1V down to a foot below water level, then 2H:1V to the pit bottom." As mentioned earlier in this letter, Rule 3.1.5(9) requires a different slope configuration. Please account for that in the revised stability evaluation to be provided.

Proof of Newspaper Publication

Please provide proof of publication of the legal notice, in the form of a notarized affidavit of publishing from the newspaper. This may be obtained from the publisher after the last of the four insertions have appeared. If outside comments or objections are received by the Division, in response to the notices, they will be forwarded to you.

Proof of Notification of Affected and Adjoining Landowners

Please provide all of the proofs of mailing and proofs of delivery, for each of the owners identified in Exhibit C and/or Exhibit S, as appropriate.

Division's Decision Date

Please respond promptly to allow the Division sufficient time to review and reply as necessary. The responses should be clear and complete, since some of the information will influence the Division's calculation of the bond amount. Unless your responses to these items include significant changes, they should not necessarily constitute a "revision" to the application, or cause an extension of the decision date. The Division's decision date is currently set for April 13, 2014.

L. Richard Bratton/M-2013-081
February 20, 2014
Page 9

Agency Comments Received

To-date, the Division has received written comments from three agencies in regard to this application, including U.S. Army Corps of Engineers, Colorado Division of Water Resources, and State Historic Preservation Office (History Colorado). Copies of the comments are enclosed herewith for your information. Please review the comments, and address as needed. It would be appreciated if copies of your replies to those agencies could be sent to this office.

Please provide two complete sets of the corrected and revised 112c application materials, to the Division's Denver office (address shown on letterhead, above). It may be helpful to our Denver staff if you would mark one set with "Please send this set to Durango office." The responses must be received by the Division a sufficient amount of time before the decision date to allow the Division to adequately review and reply to the responses and corrected materials.

I will contact you and/or your agent to schedule a pre-operation inspection of the site in the near future.

If you have questions, please contact me by telephone (Denver local): 303-866-3567 ext. 8175, or in Durango: 970-247-5193; or by email: bob.oswald@state.co.us.

Sincerely,



Bob Oswald
Environmental Protection Specialist

Encl: Comments received from ACOE, CDWR, SHPO

Ec(w/encl): Ben Langenfeld, Greg Lewicki and Associates
Ec(w/o encl): Russ Means, DRMS, Grand Junction

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